

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-3. (Canceled)

4. (Currently Amended) A device having at least one display panel, said display panel comprising:

a substrate having an insulating surface;

at least one thin film transistor formed over said substrate, said thin film transistor including at least a channel region, source and drain regions with said channel region therebetween, a gate insulating film adjacent to said channel region, and a gate electrode adjacent to said channel region with said gate insulating film interposed therebetween;

a first signal line extending in a first direction over said substrate, said first signal line comprising aluminum and being contiguous to said gate electrode;

an interlayer insulating film covering said thin film transistor;

a lead electrode comprising aluminum formed over said interlayer insulating film and electrically connected to one of the source or drain regions of said thin film transistor through a hole of said interlayer insulating film;

a second signal line formed over said interlayer insulating film and extending in a second direction orthogonal to said first direction, said second signal line comprising aluminum and electrically connected to the other one of the source or drain regions;

an organic resin film formed over the thin film transistor, said interlayer insulating film and said lead electrode to provide a leveled upper surface; and

a pixel electrode formed over said organic resin film, said pixel electrode being electrically connected to said thin film transistor via said lead electrode.

5-8. (Canceled)

9. (Currently Amended) A television comprising:

- a tuner for receiving television radio wave;
- a display panel operationally connected to said tuner, said display panel comprising:
 - a substrate having an insulating surface;
 - at least one thin film transistor formed over said substrate, said thin film transistor including at least a channel region, source and drain regions with said channel region therebetween, a gate insulating film adjacent to said channel region, and a gate electrode adjacent to said channel region with said gate insulating film interposed therebetween;
 - a first signal line extending in a first direction over said substrate, said first signal line comprising aluminum and being contiguous to said gate electrode;
 - an interlayer insulating film covering said thin film transistor;
 - a lead electrode comprising aluminum formed over said interlayer insulating film and electrically connected to one of the source or drain regions of said thin film transistor through a hole of said interlayer insulating film;
 - a second signal line formed over said interlayer insulating film and extending in a second direction orthogonal to said first direction, said second signal line comprising aluminum and electrically connected to the other one of the source or drain regions;
 - an organic resin film formed over the thin film transistor, said interlayer insulating film and said lead electrode to provide a leveled upper surface; and
 - a pixel electrode formed over said organic resin film, said pixel electrode being electrically connected to said thin film transistor via said lead electrode.

10-13. (Canceled)

14. (Currently Amended) A portable computer having a display panel, said display panel comprising:

- a substrate having an insulating surface;

at least one thin film transistor formed over said substrate, said thin film transistor including at least a channel region, source and drain regions with said channel region therebetween, a gate insulating film adjacent to said channel region, and a gate electrode adjacent to said channel region with said gate insulating film interposed therebetween;

a first signal line extending in a first direction over said substrate, said first signal line comprising aluminum and being contiguous to said gate electrode;

an interlayer insulating film covering said thin film transistor;

a lead electrode comprising aluminum formed over said interlayer insulating film and electrically connected to one of the source or drain regions of said thin film transistor through a hole of said interlayer insulating film;

a second signal line formed over said interlayer insulating film and extending in a second direction orthogonal to said first direction, said second signal line comprising aluminum and electrically connected to the other one of the source or drain regions;

an organic resin film formed over the thin film transistor, said interlayer insulating film and said lead electrode to provide a leveled upper surface; and

a pixel electrode formed over said organic resin film, said pixel electrode being electrically connected to said thin film transistor via said lead electrode.

15-19. (Canceled)

20. (Currently Amended) A device having at least one display device, said display device comprising:

a substrate having an insulating surface;

at least one thin film transistor formed over said substrate, said thin film transistor including at least a channel region, source and drain regions with said channel region therebetween, a gate insulating film adjacent to said channel region, and a gate electrode adjacent to said channel region with said gate insulating film interposed therebetween;

a first signal line extending in a first direction over said substrate, said first signal line comprising aluminum and being contiguous to said gate electrode;

an interlayer insulating film covering said thin film transistor;
a lead electrode comprising aluminum formed over said interlayer insulating film and electrically connected to one of the source or drain regions of said thin film transistor through a hole of said interlayer insulating film;
a second signal line formed over said interlayer insulating film and extending in a second direction orthogonal to said first direction, said second signal line comprising aluminum and electrically connected to the other one of the source or drain regions;
an organic resin film formed over the thin film transistor, said interlayer insulating film and said lead electrode to provide a leveled upper surface; and
a pixel electrode formed over said organic resin film, said pixel electrode being electrically connected to said thin film transistor via said lead electrode.

21-24. (Canceled)

25. (Currently Amended) A device having at least one display device, said display device comprising:

a substrate having an insulating surface;
at least one thin film transistor formed over said substrate, said thin film transistor including at least a channel region, source and drain regions with said channel region therebetween, a gate insulating film adjacent to said channel region, and a gate electrode adjacent to said channel region with said gate insulating film interposed therebetween;
a first signal line extending in a first direction over said substrate, said first signal line comprising aluminum and being contiguous to said gate electrode;
an interlayer insulating film covering said thin film transistor;
a lead electrode comprising aluminum formed over said interlayer insulating film and electrically connected to one of the source or drain regions of said thin film transistor through a first hole of said interlayer insulating film;
a second signal line formed over said interlayer insulating film and extending in a second direction orthogonal to said first direction, said second signal line comprising aluminum and electrically connected to the other one of the source or drain regions;

an organic resin film formed over the thin film transistor, said interlayer insulating film and said lead electrode to provide a leveled upper surface; and

a pixel electrode formed over said organic resin film, said pixel electrode being electrically connected to said thin film transistor via said lead electrode and through a second hole of the organic resin film,

wherein the first hole and the second hole do not overlap to each other.

26. (Currently Amended) A device having at least one display panel, said display panel comprising:

a substrate having an insulating surface;

at least one semiconductor layer formed over said substrate and comprising at least a channel region, source and drain regions with said channel region therebetween;

a gate insulating film adjacent to said channel region;

a gate electrode adjacent to said channel region with said gate insulating film interposed therebetween;

a first signal line extending in a first direction over said substrate, said first signal line comprising aluminum and being contiguous to said gate electrode;

an insulating film over at least said semiconductor layer;

a lead electrode comprising aluminum formed over said insulating film and electrically connected to one of the source or drain regions through a first hole of said insulating film;

a second signal line formed over said interlayer insulating film and extending in a second direction orthogonal to said first direction, said second signal line comprising aluminum and electrically connected to the other one of the source or drain regions;

an organic resin film over said insulating film and said lead electrode to provide a leveled upper surface; and

a pixel electrode formed over said organic resin film, said pixel electrode being electrically connected to said lead electrode through a second hole of the organic resin film.

27. (Currently Amended) A television comprising:

a tuner for receiving television radio wave;

a display panel operationally connected to said tuner, said display panel comprising:

- a substrate having an insulating surface;
- at least one semiconductor layer formed over said substrate and comprising at least a channel region, source and drain regions with said channel region therebetween;
- a gate insulating film adjacent to said channel region; and
- a gate electrode adjacent to said channel region with said gate insulating film interposed therebetween;
- a first signal line extending in a first direction over said substrate, said first signal line comprising aluminum and being contiguous to said gate electrode;
- an insulating film over at least said semiconductor layer;
- a lead electrode comprising aluminum formed over said insulating film and electrically connected to one of the source or drain regions through a first hole of said insulating film;
- a second signal line formed over said interlayer insulating film and extending in a second direction orthogonal to said first direction, said second signal line comprising aluminum and electrically connected to the other one of the source or drain regions;
- an organic resin film over said insulating film and said lead electrode to provide a leveled upper surface; and
- a pixel electrode formed over said organic resin film, said pixel electrode being electrically connected to said lead electrode through a second hole of the organic resin film.

28. (Currently Amended) A portable computer having a display panel, said display panel comprising:

- a substrate having an insulating surface;
- at least one semiconductor layer formed over said substrate and comprising at least a channel region, source and drain regions with said channel region therebetween;
- a gate insulating film adjacent to said channel region; and

a gate electrode adjacent to said channel region with said gate insulating film interposed therebetween;

a first signal line extending in a first direction over said substrate, said first signal line comprising aluminum and being contiguous to said gate electrode;

an insulating film over at least said semiconductor layer;

a lead electrode comprising aluminum formed over said insulating film and electrically connected to one of the source or drain regions through a first hole of said insulating film;

a second signal line formed over said interlayer insulating film and extending in a second direction orthogonal to said first direction, said second signal line comprising aluminum and electrically connected to the other one of the source or drain regions;

an organic resin film over said insulating film and said lead electrode to provide a leveled upper surface; and

a pixel electrode formed over said organic resin film, said pixel electrode being electrically connected to said lead electrode through a second hole of the organic resin film.

29-32. (Canceled)

33. (Currently Amended) A device having at least one display device, said display device comprising:

a substrate having an insulating surface;

at least one semiconductor layer formed over said substrate and comprising at least a channel region, source and drain regions with said channel region therebetween;

a gate insulating film adjacent to said channel region;

a gate electrode adjacent to said channel region with said gate insulating film interposed therebetween;

a first signal line extending in a first direction over said substrate, said first signal line comprising aluminum and being contiguous to said gate electrode;

an insulating film over at least said semiconductor layer;

a lead electrode comprising aluminum formed over said insulating film and electrically connected to one of the source or drain regions through a first hole of said insulating film;

a second signal line formed over said interlayer insulating film and extending in a second direction orthogonal to said first direction, said second signal line comprising aluminum and electrically connected to the other one of the source or drain regions;

an organic resin film over said insulating film and said lead electrode to provide a leveled upper surface; and

a pixel electrode formed over said organic resin film, said pixel electrode being electrically connected to said lead electrode through a second hole of the organic resin film,

wherein the first hole and the second hole do not overlap to each other.

34. (Currently Amended) A portable computer having a display panel, said display panel comprising:

a substrate having an insulating surface;

at least one thin film transistor formed over said substrate, said thin film transistor including at least a channel region, source and drain regions with said channel region therebetween, a gate insulating film adjacent to said channel region, and a gate electrode adjacent to said channel region with said gate insulating film interposed therebetween;

a first signal line extending in a first direction over said substrate, said first signal line comprising aluminum and being contiguous to said gate electrode;

an interlayer insulating film covering said thin film transistor;

a lead electrode comprising aluminum formed over said interlayer insulating film and electrically connected to one of the source or drain regions of said thin film transistor through a hole of said interlayer insulating film;

a second signal line formed over said interlayer insulating film and extending in a second direction orthogonal to said first direction, said second signal line comprising aluminum and electrically connected to the other one of the source or drain regions;

an organic resin film formed over the thin film transistor, said interlayer insulating film and said lead electrode to provide a leveled upper surface; and

a pixel electrode formed over said organic resin film, said pixel electrode being electrically connected to said thin film transistor via said lead electrode,

wherein during applying a reference signal having a varying voltage to the other one of the source or drain regions, a select signal is applied to the gate electrode in order to perform a gradation display.

35. (Previously Presented) The portable computer according to claim 34 wherein said thin film transistor is complementarily connected to another thin film transistor and said select signal is a bipolar pulse.

36. (Previously Presented) The device according to claim 4 wherein said display panel is a liquid crystal device.

37. (Previously Presented) The television according to claim 9 wherein said display panel is a liquid crystal device.

38. (Previously Presented) The portable computer according to claim 14 wherein said display panel is a liquid crystal device.

39. (Previously Presented) The device according to claim 20 wherein said display panel is a liquid crystal device.

40. (Previously Presented) The device according to claim 22 wherein said display panel is a liquid crystal device.

41. (Previously Presented) The television according to claim 23 wherein said display panel is a liquid crystal device.

42. (Previously Presented) The portable computer according to claim 24 wherein said display panel is a liquid crystal device.

43. (Previously Presented) The device according to claim 25 wherein said display panel is a liquid crystal device.

44. (Previously Presented) The device according to claim 26 wherein said display panel is a liquid crystal device.

45. (Previously Presented) The television according to claim 27 wherein said display panel is a liquid crystal device.

46. (Previously Presented) The portable computer according to claim 28 wherein said display panel is a liquid crystal device.

47. (Previously Presented) The device according to claim 29 wherein said display panel is a liquid crystal device.


48. (Previously Presented) The device according to claim 30 wherein said display panel is a liquid crystal device.

49. (Previously Presented) The television according to claim 31 wherein said display panel is a liquid crystal device.

50. (Previously Presented) The portable computer according to claim 32 wherein said display panel is a liquid crystal device.

51. (Previously Presented) The device according to claim 33 wherein said display panel is a liquid crystal device.

52. (Previously Presented) The portable computer according to claim 34 wherein said display panel is a liquid crystal device.

 53. (Previously Presented) The portable computer according to claim 35 wherein said display panel is a liquid crystal device.
